

REMARKS

The Office Action dated July 11, 2008 has been read and carefully considered and the present amendment filed to better define the present invention with respect to the cited references.

In that Office Action, claims 1-5, 9-32, 34, 35, 38, 41 and 43-47 were rejected under 35 U.S.C. 103(a) as being unpatentable over Boone et al, U.S. Publication 2002/0196141 in view of Kuaua et al, WO 02/45566.

Applicant respectfully traverses that rejection. Again, as set forth in the prior amendment, the purpose of the present invention is to provide an integrated monitoring apparatus where there is an integration of both physiological information concerning the patient as well as environmental information concerning the particular apparatus that is being used to treat the patient, that is, information relating to the environment within which the patient is situated. That information from the two different sources is then converted into a visual readout or display that provides a recommended course of action to the user and further that such recommended course of action is therefore based upon information that relates to both "the environment surrounding the patient as well as a physiological condition of the patient". Thus two different, disparate types of information relating to the well-being of the patient are gathered, combined and used to provide diagnostic information to the user.

It is, therefore, the combination of the types of information, that is, both information relating to the environment surrounding the patient as well as some physiological condition of patient that provides a unique opportunity in accordance with the present invention to analyze the combined information available in an integrated form and to provide a diagnostic assessment of potential situations concerning the patient.

Accordingly, one of the important and, indeed essential, inputs for determining a diagnostic assessment of such potential situations concerning the patient with the present invention is the environmental parameter that is indicative of that controlled environment that surrounds the patient.

As now recited in the claims, the invention includes a means of providing a controlled environment for the patient and that environment is constantly sensed to provide important data for the diagnosis of a potential problem in caring for the patient and in conveying some recommendation to the user of how to deal with a potential or existing problem. With an analysis of the input indicative of the controlled environment within which the patient is disposed there is additional information that can aid in the identification of potential concerns that could provide valuable input to the recommendation conveyed to the user. The environmental information is basically derived from the environment that is controlled by the carestation.

As such, without the analysis and input of the environmental information, the recommendation to the user is incomplete.

Accordingly, it is submitted that a patient carestation having the ability to integrate a stream of signals from both an environmental sensor as well as a physiological sensor and then use that combined stream of information to analyze the information from the differing types of sensors to diagnose problems and provide a recommended course of action based on that combination of information is both novel and unobvious over the Boone et al reference taken along with the Kraus reference.

It is noted, and conceded by the Examiner, that the Boone reference does not prove the user with a recommended course of action and the Kraus reference has been cited for that feature to modify Boone et al. However, the Krause et al reference is silent on the very important input of environmental conditions surrounding the patient, one of the necessary inputs with the present invention to obtain a broader, more comprehensive recommendation to the user.

The Kraus et al reference discloses an automated medical diagnostic and treatment system that is intended for a variety of uses and locations including locations where no physician is present, such as an "out of hospital environment" including in an ambulance and the like where the information is intended for use by an operator other than a medical doctor, and not in a hospital facility where the apparatus is providing a controlled environment for the patient. There is an embodiment where the system is eventually moved to a hospital such as an emergency department, medical ward or intensive care unit, however, even in such locations, there is no indication, hint or suggestion that the system of Kraus et al has any connection or reference to data or information relating to a controlled environment surrounding the patient. The Kraus et al system uses only information indicative of a medical condition of the patient and therefore misses the entire concept of the useful information that can be gleaned by the availability and use of environmental information.

As such, Kraus et al has no input relating to the environment of the patient, nor would an environmental parameter be suggested merely because Boone et al has such signals available. Kraus et al takes no reading of the patient's environment and the entire tenor of Kraus et al is solely directed to the acquisition and use of medical parameters concerning a medical condition of the patient, and, not having any way to control the environment of the patient, would not be sought by one skilled in the art to modify Boone et al simply because Boone et al may have additional signals available.

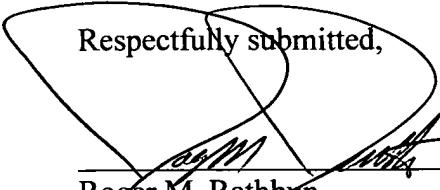
Thus, the combination of Boone et al and Kraus et al falls short in providing the comprehensive and valuable recommendations where the patient environment is a factor in determining those recommendations. In essence, the ability of the present invention to control the environment enables the present system to analyze data and provide recommendations far beyond what Kraus et al ever could envision.

For example, with access to information concerning the controlled environment surrounding the patient, if the patient skin temperature and the air temperature (environmental parameter) are both increasing, it is an indication that the fan has failed in the patient care apparatus and a notice to that effect can be made to the caregiver in a timely manner i.e. CHECK FAN to look into the situation and check the operation of the fan. If the patient skin temperature is decreasing while the air temperature within the controlled environment is stable, it is an indication that the skin temperature probe is loose or has been separated from the patient, again a recommendation can be made to the user to the effect "CHECK INFANT PROBE and, again, the presence and use of an environmental parameter provides a valuable input in assessing a problem in caring for the patient.

Other examples are equally enlightening; if the ECG indicates an increase in heart rate while the O₂ in the surrounding environment is dropping, there is a risk of danger to the patient that must be corrected immediately. As another example, if the patient's blood oxygen concentration is decreasing and the O₂ in the environment is also decreasing, there is a danger of oxygen toxicity and the readout could warn the caregiver to take immediate action to verify the oxygen supply to the environment. While there are numerous other examples of the benefit of the additional sensors concerning the environment of the patient, the essence of the present argument, however, is that by having a controlled environment surrounding the patient along with sensors for monitoring that environment, an entirely new and additional set of recommendations can be made available to the caregiver, above and beyond anything considered or suggested by Kraus et al.

Accordingly, it is submitted that the claims, as now amended, are patentable over the cited reference and an allowance of the present application is respectfully solicited.

Respectfully submitted,


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